

I claim:

1. A method for conserving addresses in a finite address domain,
comprising:

5 reserving an address in the domain for intra-switch only applications;
 assigning the address to a switch;
 interconnecting the switch in a network; and
 applying the address solely within the switch.

2. The method according to claim 1, further comprising repeating the
10 assigning, interconnecting and applying steps for a second switch in a second
 network.

3. The method according to claim 1, wherein the address is a media
 access control (MAC) address.

4. A method for conserving addresses in a finite address domain,
15 comprising:
 reserving a first address in the domain for a particular manufacturer;
 reserving a second address in the domain for intra-switch only
 applications;

20 assigning the first address and the second address to a switch;
 interconnecting the switch to a transmission medium;
 applying the first address on the transmission medium; and
 applying the second address solely within the switch.

5. The method according to claim 4, further comprising:
 requesting allocation of a reserved address from the domain; and

allocating the first address in response to the request if the requester is the particular manufacturer.

6. The method according to claim 4, wherein the addresses are MAC addresses.

5 7. A method for conserving addresses in a finite address domain, comprising:

reserving a first address in the domain for a first manufacturer;

reserving second address in the domain for a second manufacturer;

10 assigning the first addresses and a third address to a switch manufactured by the first manufacturer;

assigning the second address and the third address to a switch manufactured by the second manufacturer;

interconnecting the switches to respective transmission media;

15 applying the first address and the second address on the respective transmission media; and

applying the third address solely within the respective switches.

8. The method according to claim 7, further comprising:

allocating the first address to the first manufacturer in response to a request by the first manufacturer; and

20 allocating the second address to the second manufacturer in response to a request by the second manufacturer.

9. A switch operative in a network and having a plurality of addresses assigned thereto including at least one organizationally unique address and at

least one organizationally redundant address, wherein the organizationally redundant address is applied solely within the switch.

10. The switch according to claim 9, wherein the organizationally unique address is applied outside the switch.

11. The switch according to claim 9 wherein the addresses are MAC addresses.

12. A network, comprising:

a first switch having a first address and a second address assigned thereto;

a second switch having the first address and a third address assigned thereto; and

a transmission medium interconnecting the first switch and the second switch;

wherein the first address is transmitted solely within the first switch and the second switch, and the second address and the third address are transmitted between the first switch and the second switch on the transmission medium.

13. The network according to claim 12, wherein the first, second and third addresses are MAC addresses.

14. A method for conserving MAC addresses, comprising:

reserving a MAC address for intra-device only applications;

assigning the MAC address to a device;

interconnecting the device in a network; and

applying the MAC address solely within the device.

15. The method according to claim 14, further comprising repeating the assigning, interconnecting and applying steps for a second device in a second network.

16. The method according to claim 14, wherein the device is a switch.

5 17. A device operative in a network and having a plurality of MAC addresses assigned thereto including at least one organizationally unique MAC address and at least one organizationally redundant MAC address, wherein the organizationally redundant MAC address is applied solely within the device.

10 18. The device according to claim 17, wherein the organizationally unique MAC address is applied outside the device.

19. A network, comprising:

a first device having a first MAC address and a second MAC address assigned thereto;

15 a second device having the first MAC address and a third MAC address assigned thereto; and

a transmission medium interconnecting the first device and the second device;

20 wherein the first MAC address is transmitted solely within the first device and the second device, and the second MAC address and the third MAC address are transmitted between the first device and the second device on the transmission medium.